WHAT IS CLAIMED IS:

1. A method for analyzing in a cell for the effect on expression of an expression inhibiting nucleic acid, where the nucleic acid interacts with mRNA using an expression construct expressing a fusion protein of the small enzyme donor (ED) fragment of β-galactosidase with a polypeptide, where said expression inhibiting nucleic acid affects the activity of β-galactosidase resulting from said ED forming a functional enzyme with the large enzyme acceptor (EA) fragment of β-galactosidase, said method comprising:

maintaining a cell comprising said expression construct and said expression inhibiting nucleic acid

providing said EA to any of said fusion protein produced in said cell to form β-galactosidase, and a β-galactosidase substrate that produces a detectable product; and

determining the activity of said functional enzyme by use of said detectable product,

whereby the activity of said functional enzyme is related to said effect on expression.

2. A method according to Claim 1, wherein said effect on expression is the inhibition of expression by a DNA molecule.

3. A method according to Claim 1, wherein said nucleic acid is an RNA molecule

4. A method according to Claim 3, wherein said RNA molecule is dsRNA

5. A method according to Claim 4, wherein said dsRNA is RNAi.

6. A method according to Claim 1 wherein said cell is grown in the presence of a candidate compound.

7. A method according to Claim 1, wherein said cell is a mammalian cell.

8. A method for analyzing in a cell the effect on expression of an expression inhibiting RNA where the RNA interacts with mRNA using an expression construct expressing a fusion protein of the small enzyme donor (ED) fragment of β-galactosidase with a polypeptide, where said effect on expression affects the activity of said ED in forming a functional enzyme with the large enzyme acceptor (EA) fragment of β-galactosidase, said method comprising:

maintaining a cell comprising said expression construct and said expression inhibiting RNA;

providing said EA to any of said fusion protein produced in said cell to form β-galactosidase, and a β-galactosidase substrate that produces a detectable product; and

determining the activity of said functional enzyme by use of said detectable product,

whereby the activity of said functional enzyme is related to said transcription in said cell.

9. A method according to Claim 8, wherein said RNA is double stranded RNA

10. A method according to Claim 9, wherein said RNA is RNAi.

11. A method according to Claim 8, wherein said expression inhibiting RNA is added to said cell.

12. A method according to Claim 8, wherein said expression inhibiting RNA is transcribed in said cell.

13. A method according to Claim 8, wherein said substrate produces a fluorescent product.

14. A method according to Claim 8, wherein said cell is a cell line.

15. A method according to Claim 8 wherein said cell is grown in the presence of a candidate compound.

16. A method according to Claim 8, wherein said cell is lysed prior to said determining and said determining is of said lysate.

17. A method according to Claim 8 wherein said expression inhibiting RNA inhibits expression of a transcription factor.

18. A system for determining in mammalian cells the effect of an expression inhibiting dsRNA on expression of a first protein where the dsRNA interacts with mRNA, employing a fusion protein comprising a β-galactosidase enzyme donor ("ED") fused to a second protein, where said first and second proteins are related in that the level of expression of said first protein fusion protein are interrelated, said determining comprising measuring the β-galactosidase activity of said fusion protein in the presence of an enzyme acceptor ("EA") capable of being complemented by said ED of said fusion protein to form a functionally active β-galactosidase enzyme, said system comprising:

(1) a vector comprising a first transcriptional and translational regulatory region functional in said host cell, (2) an ED sequence encoding said ED joined to a multiple cloning site ("mcs") under the regulation of said transcriptional and translational regulatory region; the same or different vector as (1) comprising a second transcriptional regulatory region functional in said host cell and a gene encoding said inhibiting dsRNA under the regulation of said transcriptional regulatory region; (3) an enzyme acceptor protein; (4) a gene when inserted in said mcs in reading frame with said ED sequence expresses a biologically active

protein and an ED capable of complementing said EA; (5) host cells in which said transcriptional and translational region is functional; and (6) substrate for said β-galactosidase enzyme that upon hydrolysis produces a detectable signal.

19. A system according to Claim 18, wherein said first and second transcriptional regulatory regions have the same transcription factors.

20. A system according to Claim 19, wherein said first and second transcriptional regulatory regions have different transcription factors.

21. A system according to Claim 18, wherein said host cell expresses EA.

22. A kit for use in a method according to Claim 1 comprising: an expression construct of the small enzyme donor fragment of β-galactosidase fused to a protein of interest, an expression inhibiting double stranded RNA for said protein of interest, and at least one of an enzyme acceptor fragment of β-galactosidase or a β-galactosidase substrate producing a detectable product.